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SEQUENCE LISTING

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Sarbasov, Dos D.

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Ile Cys Thr Arg Thr Val Gln His Gln Asp Ser Gln Val Asn Ala Leu
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Glu Val Thr Pro Asp Arg Ser Met Ile Ala Ala Ala Gly Tyr Gln His
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Ile Arg Met Tyr Asp Leu Asn Ser Asn Asn Pro Asn Pro Ile Ile Ser
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Tyr Asp Gly Val Asn Lys Asn Ile Ala Ser Val Gly Phe His Glu Asp
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Gly Arg Trp Met Tyr Thr Gly Gly Glu Asp Cys Thr Ala Arg Ile Trp
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 Thr Ala Gly Tyr Asp His Thr Val Arg Phe Trp Gln Ala His Ser Gly
 20 25 30
 Ile Cys Thr Arg Thr Val Gln His Gln Asp Ser Gln Val Asn Ala Leu
 35 40 45
 Glu Val Thr Pro Asp Arg Ser Met Ile Ala Ala Ala Gly Tyr Gln His
 50 55 60
 Ile Arg Met Tyr Asp Leu Asn Ser Asn Asn Pro Asn Pro Ile Ile Ser
 65 70 75 80
 Tyr Asp Gly Val Asn Lys Asn Ile Ala Ser Val Gly Phe His Glu Asp
 85 90 95
 Gly Arg Trp Met Tyr Thr Gly Gly Glu Asp Cys Thr Ala Arg Ile Trp
 100 105 110
 Asp Leu Arg Ser Arg Asn Leu Gln Cys Gln Arg Ile Phe Gln Val Asn
 115 120 125
 Ala Pro Ile Asn Cys Val Cys Leu His Pro Asn Gln Ala Glu Leu Ile
 130 135 140
 Val Gly Asp Gln Ser Gly Ala Ile His Ile Trp Asp Leu Lys Thr Asp
 145 150 155 160
 His Asn Glu Gln Leu Ile Pro Glu Pro Glu Val Ser Ile Thr Ser Ala
 165 170 175
 His Ile Asp Pro Asp Ala Ser Tyr Met Ala Ala Val Asn Ser Thr Gly
 180 185 190
 Asn Cys Tyr Val Trp Asn Leu Thr Gly Gly Ile Gly Asp Glu Val Thr
 195 200 205
 Gln Leu Ile Pro Lys Thr Lys Ile Pro Ala His Thr Arg Tyr Ala Leu
 210 215 220
 Gln Cys Arg Phe Ser Pro Asp Ser Thr Leu Leu Ala Thr Cys Ser Ala
 225 230 235 240

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Asp Gln Thr Cys Lys Ile Trp Arg Thr Ser Asn Phe Ser Leu Met Thr
245 250 255
Glu Leu Ser Ile Lys Ser Gly Asn Pro Gly Glu Ser Ser Arg Gly Trp
260 265 270
Met Trp Gly Cys Ala Phe Ser Gly Asp Ser Gln Tyr Ile Val Thr Ala
275 280 285
Ser Ser Asp Asn Leu Ala Arg Leu Trp Cys Val Glu Thr Gly Glu Ile
290 295 300
Lys Arg Glu Tyr Gly Gly His Gln Lys Ala Val Val Cys Leu Ala Phe
305 310 315 320
Asn Asp Ser Val Leu Gly
325

<210> 29
<211> 30
<212> PRT
<213> Homo sapiens

<400> 29
Cys Gln Gln Tyr Phe Leu Tyr Ile Gly Arg Met Cys Arg Thr Val Lys
1 5 10 15
Gly Ile Glu Val Leu Lys Asn Thr Thr Val Phe Glu Tyr Leu
20 25 30

<210> 30
<211> 30
<212> PRT
<213> Homo sapiens

<400> 30
Cys Gln His Tyr Phe Leu Phe Ile Gly Arg Met Cys Arg Thr Glu Gly
1 5 10 15
Gly Leu Glu Ile Leu Arg Asn Thr Asp Val Phe Lys Glu Leu
20 25 30

<210> 31
<211> 30
<212> PRT
<213> Homo sapiens

<400> 31
Ser Gln His Tyr Phe Leu Phe Ile Gly Thr Leu Ser Cys His Pro His
1 5 10 15
Gly Val Lys Met Leu Glu Lys Cys Ser Val Phe Gln Cys Leu
20 25 30

<210> 32
<211> 30
<212> PRT
<213> Homo sapiens

<400> 32
Ser Arg Glu Tyr Phe Thr Met Leu Gly Thr Leu Ser Ser Asn Leu Leu
1 5 10 15

Gly Leu Glu Ile Leu Ala Arg Asn Asn Ile Phe Asp Tyr Ile
 20 25 30

<210> 33
 <211> 30
 <212> PRT
 <213> Homo sapiens

<400> 33
 Thr His Gly Tyr Phe Pro Met Leu Lys Val Leu Ser Ser Gln Lys Glu
 1 5 10 15
 Gly His Ala Ile Met Glu Arg Trp Arg Ile Phe Thr Thr Leu
 20 25 30

<210> 34
 <211> 30
 <212> PRT
 <213> Homo sapiens

<400> 34
 Pro Asn Val Ala Pro His Leu Tyr Gly Gln Met Ala Gln Thr Gly Gln
 1 5 10 15
 Gly Met Thr Ala Leu Arg Lys His Gly Asp Leu Pro Gln Leu
 20 25 30

<210> 35
 <211> 30
 <212> PRT
 <213> Homo sapiens

<400> 35
 Pro Asn Leu Ala Pro His Leu Tyr Gly Gln Leu Val Gln Thr Ser Lys
 1 5 10 15
 Gly Phe Ser Gln Leu Leu Thr His Gly Arg Leu Leu Glu Leu
 20 25 30

<210> 36
 <211> 30
 <212> PRT
 <213> Homo sapiens

<400> 36
 Val Tyr Leu Pro Ile His Leu Tyr Gly Gln Leu Val His His Lys Thr
 1 5 10 15
 Gly Cys His Leu Leu Glu Val Gln Asn Ile Ile Thr Glu Leu
 20 25 30

<210> 37
 <211> 30
 <212> PRT
 <213> Homo sapiens

<400> 37

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Val	Tyr	Leu	Pro	Pro	His	Phe	Phe	Gly	Glu	Leu	Ala	Lys	Thr	Glu	Lys
1				5					10					15	
Gly	Cys	Gln	Leu	Ile	Arg	Lys	Ser	Asn	Asn	Tyr	Gln	Arg	Phe		
			20					25					30		

<210> 38
<211> 29
<212> PRT
<213> Homo sapiens

Ile	Leu	Pro	Leu	His	Phe	Tyr	Gly	Glu	Leu	Val	Lys	Ser	Pro	Gln	Gly
1				5					10					15	
Cys	Glu	Val	Leu	Glu	Ser	Ser	Gly	His	Phe	Glu	Ser	Phe			
			20					25							

<210> 39
<211> 30
<212> PRT
<213> Homo sapiens

Leu	Lys	Ala	Ala	Ile	Trp	Ala	Leu	Ala	His	Ala	Ser	Thr	His	Ser	Asn
1				5					10					15	
Gly	Ile	Glu	Tyr	Phe	Val	Glu	Leu	Asn	Ala	Arg	Leu	Tyr	Glu		
			20					25					30		

<210> 40
<211> 30
<212> PRT
<213> Homo sapiens

Leu	Lys	Ala	Ala	Leu	Trp	Ala	Leu	Met	His	Ala	Cys	Thr	Ser	Lys	Glu
1				5					10					15	
Ala	Ile	Glu	Tyr	Phe	Thr	Glu	His	Val	Pro	Trp	Leu	Leu	Ala		
			20					25					30		

<210> 41
<211> 30
<212> PRT
<213> Homo sapiens

Leu	Lys	Ala	Ser	Leu	Trp	Ala	Leu	Gly	Asn	Ile	Gly	Ser	Ser	Asn	Trp
1				5					10					15	
Gly	Leu	Asn	Leu	Leu	Gln	Glu	Glu	Asn	Val	Ile	Pro	Asp	Ile		
			20					25					30		

<210> 42
<211> 30
<212> PRT
<213> Homo sapiens

<400> 42

Lys	Arg	Ala	Ser	Leu	Ile	Ala	Ile	Gly	His	Ile	Gly	Ser	Ser	Val	Asp
1				5					10					15	
Gly	Tyr	Ser	Phe	Val	Lys	Glu	Ser	Asp	Thr	Ile	Lys	Leu	Leu		
			20					25					30		

<210> 43

<211> 30

<212> PRT

<213> Homo sapiens

<400> 43

Leu	Lys	Ser	Ala	Leu	Trp	Ala	Ile	Gly	Asn	Ile	Gly	Lys	Thr	Asp	Gln
1				5					10					15	
Gly	Ile	Thr	Phe	Leu	Ile	Asn	His	Asp	Thr	Ile	Pro	Leu	Ile		
			20					25					30		

<210> 44

<211> 30

<212> PRT

<213> Homo sapiens

<400> 44

Arg	Ala	Thr	Cys	Phe	Ser	Ala	Leu	Gly	Leu	Ile	Ala	Gly	Thr	Gln	Ala
1				5					10					15	
Gly	Ala	Asn	Ile	Leu	Phe	Lys	Leu	Asn	Trp	Leu	Ser	Val	Arg		
			20					25					30		

<210> 45

<211> 30

<212> PRT

<213> Homo sapiens

<400> 45

Arg	Ala	Thr	Ala	Leu	Gly	Gly	Leu	Cys	Leu	Val	Ala	Ser	Thr	Ala	Gln
1				5					10					15	
Gly	Ala	Asp	Ala	Leu	Arg	Thr	Leu	Gly	Trp	Val	Ala	Val	Arg		
			20					25					30		

<210> 46

<211> 30

<212> PRT

<213> Homo sapiens

<400> 46

Arg	Gly	Thr	Cys	Val	Tyr	Val	Leu	Gly	Leu	Ile	Ala	Lys	Thr	Lys	Gln
1				5					10					15	
Gly	Cys	Asp	Ile	Leu	Lys	Cys	His	Asn	Trp	Asp	Ala	Val	Arg		
			20					25					30		

<210> 47

<211> 30

<212> PRT

<213> Homo sapiens

<400> 47

Arg	Ser	Thr	Cys	Phe	Tyr	Ala	Leu	Gly	Met	Ile	Ser	Cys	Ile	Glu	Glu
1				5					10					15	
Ala	Gln	Pro	Ile	Phe	Asn	Ser	Phe	Gly	Trp	Glu	Ser	Pro	Ser		
			20					25					30		

<210> 48

<211> 30

<212> PRT

<213> Homo sapiens

<400> 48

Arg	Gly	Thr	Ala	Tyr	Phe	Val	Leu	Gly	Leu	Ile	Ser	Arg	Thr	Ser	Lys
1				5					10					15	
Gly	Val	Glu	Ile	Leu	Glu	Ser	Leu	His	Trp	Tyr	Ser	Leu	Met		
			20					25					30		

<210> 49

<211> 325

<212> PRT

<213> Homo sapiens

<400> 49

Met	Asn	Thr	Ser	Pro	Gly	Thr	Val	Gly	Ser	Asp	Pro	Val	Ile	Leu	Ala
1				5					10					15	
Thr	Ala	Gly	Tyr	Asp	His	Thr	Val	Arg	Phe	Trp	Gln	Ala	His	Ser	Gly
			20					25					30		
Ile	Cys	Thr	Arg	Thr	Val	Gln	His	Gln	Asp	Ser	Gln	Val	Asn	Ala	Leu
		35				40						45			
Glu	Val	Thr	Pro	Asp	Arg	Ser	Met	Ile	Ala	Ala	Ala	Gly	Tyr	Gln	His
	50					55					60				
Ile	Arg	Met	Tyr	Asp	Leu	Asn	Ser	Asn	Asn	Pro	Asn	Pro	Ile	Ile	Ser
65					70					75					80
Tyr	Asp	Gly	Val	Asn	Lys	Asn	Ile	Ala	Ser	Val	Gly	Phe	His	Glu	Asp
				85					90					95	
Gly	Arg	Trp	Met	Tyr	Thr	Gly	Gly	Glu	Asp	Cys	Thr	Ala	Arg	Ile	Trp
			100					105						110	
Asp	Leu	Arg	Ser	Arg	Asn	Leu	Gln	Cys	Gln	Arg	Ile	Phe	Gln	Val	Asn
			115				120					125			
Ala	Pro	Ile	Asn	Cys	Val	Cys	Leu	His	Pro	Asn	Gln	Ala	Glu	Leu	Ile
	130						135					140			
Val	Gly	Asp	Gln	Ser	Gly	Ala	Ile	His	Ile	Trp	Asp	Leu	Lys	Thr	Asp
145					150					155					160
His	Asn	Glu	Gln	Leu	Ile	Pro	Glu	Pro	Glu	Val	Ser	Ile	Thr	Ser	Ala
				165					170					175	
His	Ile	Asp	Pro	Asp	Ala	Ser	Tyr	Met	Ala	Ala	Val	Asn	Ser	Thr	Gly
			180					185						190	
Asn	Cys	Tyr	Val	Trp	Asn	Leu	Gly	Gly	Ile	Gly	Asp	Glu	Val	Thr	Gln
		195					200					205			
Leu	Ile	Pro	Lys	Thr	Lys	Ile	Pro	Ala	His	Thr	Arg	Tyr	Ala	Leu	Gln
			210				215					220			
Cys	Arg	Phe	Ser	Pro	Asp	Ser	Thr	Leu	Leu	Ala	Thr	Cys	Ser	Ala	Asp
225					230					235					240
Gln	Thr	Cys	Lys	Ile	Trp	Arg	Thr	Ser	Asn	Phe	Ser	Leu	Met	Thr	Glu
				245					250					255	
Leu	Ser	Ile	Lys	Ser	Gly	Asn	Pro	Gly	Glu	Ser	Ser	Arg	Gly	Trp	Met
			260					265						270	

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Trp Gly Cys Ala Phe Ser Gly Asp Ser Gln Tyr Ile Val Thr Ala Ser
275 280 285
Ser Asp Asn Leu Ala Arg Leu Trp Cys Val Glu Thr Gly Glu Ile Lys
290 295 300
Arg Glu Tyr Gly Gly His Gln Lys Ala Val Val Cys Leu Ala Phe Asn
305 310 315 320
Asp Ser Val Leu Gly
325

<210> 50
<211> 15
<212> PRT
<213> Homo sapiens

<400> 50
Arg Gly Arg Ser Leu Lys Asn Leu Arg Val Arg Gly Arg Asn Asp
1 5 10 15

<210> 51
<211> 20
<212> PRT
<213> Homo sapiens

<400> 51
Met Glu Ser Glu Met Leu Gln Ser Pro Leu Leu Gly Leu Gly Glu Glu
1 5 10 15
Asp Glu Ala Asp
20